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Update on Implementation of the Hazardous Waste Minimization and Combustion Strategy

UPDATE ON IMPLEMENTATION OF DRAFT STRATEGY ON HAZARDOUS WASTE MINIMIZATION AND COMBUSTION
November 18, 1994

The Draft Strategy specified 5 overall goals and several specific actions. The goals were:

(1) To establish a strong preference for source reduction over waste management, and thereby reduce the long-term demand for combustion and other waste management facilities.

(2) To better address public participation in setting a national source reduction agenda, in evaluating technical combustion issues, and in reaching site-specific decisions during the waste combustion permitting process.

(3) To develop and impose implementable and rigorous state-of-the-art safety controls on hazardous waste combustion facilities by using the best available technologies and the most current science.

(4) To ensure that combustion facilities do not pose an unacceptable risk, and use the full extent of legal authorities in permitting and enforcement.

(5) To continue to advance scientific understanding with regard to waste combustion issues.

The chart below contains the specific commitments made in the Draft Strategy. The chart details the status of individual projects implementing the goals and commitments of the Draft Strategy, and future objectives are identified.

COMMITMENT	WHERE WE ARE	WHERE WE WANT TO BE IN TWO YEARS
WORKING WITH STATES Establish EPA-State Committee to provide for a joint federal-state evaluation of waste minimization and combustion relationships; improvements to technical standards; and the alternatives to combustion.	• EPA-State Hazardous Waste Steering Committee was established in July 1993. Five meetings via teleconference have been held. • Input from states has been sought on significant Strategy implementation projects, particularly the public participation rule, use of a technology-based approach in the emission standards rulemaking, and approaches to waste minimization.	• The EPA-State Steering Committee should continue to be used as a means of upper management communication on major issues as they arise. • Continuing to work with states should still be a top priority. We should strive for very direct and effective means of obtaining state input to RCRA decision-making.
PUBLIC OUTREACH AND DIALOGUE Conduct broad national dialogue with stakeholders on all goals and issues, specifically including the areas of source reduction, technical standards, and site-specific decisions.	• 4-day National Roundtable held with stakeholders on waste minimization and combustion issues. • 4 Regional Roundtables held with local citizens and other stakeholders on waste minimization, combustion, and other issues of local concern. • Hundreds of meetings with individual stakeholders and stakeholder groups held, and informal dialogue still ongoing. • Strategy Newsletter created and distributed to over 3000 individual citizens and other interested persons/groups to update them on Strategy developments. • Key policy and technical documents released in early draft form for public review. Documents include: preliminary technical analysis on achievable dioxin and particulate matter (PM) emission levels, draft national waste minimization plan, and draft risk assessment guidance.	• Continued use of same avenues, but also investigate whether EPA role should include more public education (e.g., on risk). • Fully informed local communities (apart from permitting process itself).

COMMITMENT	WHERE WE ARE	WHERE WE WANT TO BE IN TWO YEARS
WASTE MINIMIZATION Publish final "Waste Minimization Program in Place" guidelines, and pursue compliance with waste minimization certification requirements. Consider publication of lists of non-compliers. Ask treatment companies to consider accepting wastes only from customers in compliance with waste minimization program in place guidance. Establish other partnerships to achieve maximum amount of source reduction. Give top waste minimization compliance priority to facilities driving demand for waste combustion. Use audits and other compliance-forcing mechanisms as appropriate. Conduct national roundtable on source reduction opportunities for hazardous wastes.Maximize public involvement, and provide public with information on source reduction of combustible wastes.	• Released interim final "Waste Minimization Program in Place" guidelines in May 1993. • In November 1993, Administrator's letter sent to all large quantity RCRA generators urging public release of their waste minimization plans. • Held national and regional roundtables and focus group meetings with stakeholders to help shape waste minimization goals and implementation options, including identification of proper roles for waste treatment companies and potential partnerships. • Draft RCRA National Waste Minimization Plan released in May 1994 for public review and comment. Draft Plan focused on combustible waste streams as top priority (Phase I). Phase II would address all RCRA wastes, starting with those persistent, bioaccumulative, and toxic constituents representing the highest risk. Emphasis in Plan is on company-by-company flexibility and voluntary programs, but requirements are being considered where needed to ensure action. Draft Plan also indicates that final plan will have specific percentage and time frame targets. • 4-day National Roundtable held with States and other stakeholders on waste minimization and combustion issues. • Focus groups meetings on Draft National Plan held with States and other stakeholders in Fall 1994.	• Final "Waste Minimization Program in Place" guidelines issued. • Good public awareness should exist about company plans on waste minimization, and public should be engaged in oversight of company progress. • Make good progress towards achieving national goals for waste reductions through National Waste Minimization Plan (see below), with emphasis on partnerships and voluntary programs. • Implementation of National Plan in full swing, with publication (if possible) of initial results of source reduction and recycling efforts.

COMMITMENT	WHERE WE ARE	WHERE WE WANT TO BE IN TWO YEARS
WASTE MINIMIZATION (cont'd) Develop waste minimization (source reduction and recycling) program that integrates waste combustion with waste management decision-making. Work with states towards establishing percentage and time frame targets for reduction of combustible waste streams.	• Release of final Hazardous Waste Minimization National Plan in November 1994. National Plan addresses all RCRA wastes, starting with those persistent, bioaccumulative, and toxic constituents representing the highest risk. Emphasis in Plan is on company-by-company flexibility and voluntary programs in initial implementation, but progress will be reviewed at a future point to determine if more aggressive action is warranted. National Plan calls for reduction of the most persistent, bioaccumulative, and/or toxic constituents in hazardous waste by 25% nationally by the year 2000, and by 50% nationally by the year 2005. Initial EPA implementation focus will be on metal constituents in combustible waste streams.	• Implementation of National Plan in full swing, with publication (if possible) of initial results on source reduction and recycling efforts.

COMMITMENT	WHERE WE ARE	WHERE WE WANT TO BE IN TWO YEARS
IMPROVED EMISSION STANDARDS AND MONITORING Upgrade EPA rules on emission controls at combustion facilities and on continuous emissions monitoring techniques. Consider joint RCRA-CAA rulemaking to impose maximum achievable, technology-based standards. Continue research into better determining the emissions from hazardous waste combustion facilities and into fostering better emissions monitoring devices.	• OSW studies on HW incinerators and BIFs are under way to provide sound technical basis for proposed rule. Some data gaps exist, but plans to collect data to address these areas have been made. • Preliminary maximum achievable, technology-based levels for dioxin/furan and particulate matter levels analyzed and released for public review in May 1994 (draft CETRED document). • OSW-led workgroup is actively developing joint RCRA-CAA proposed rule to upgrade emission standards for combustion facilities. Technical and policy dialogue between OAQPS and OSW is ongoing. Proposed rule scheduled for Sept. 1995 and final rule scheduled for Dec. 1996. • OSW issued guidance on conducting trial burns and on trial burn failures in May and July 1994. • OSWER AA memorandum released in May 1994 that clarified prohibition against certain metal-bearing waste streams going to combustion. • OSW has acted to spur ORD research on continuous emissions monitors and to foster private consortium efforts to speed up development and commercial availability of continuous emissions monitors for metals, PM, and organics. OSW/ORD submitted two Environmental Technology Initiatives (ETI) proposals for CEM technical development and validation.	• Build better OSW technical data base. • Better clarify linkage between waste minimization and combustion, particularly with respect to increased removal of metals from wastes going to incinerators and BIFs. • Promulgate final rule to impose upgraded emission controls on HW incinerators and BIFs. • Implement rule as soon as possible to achieve immediate reduction in dioxin, furan, and metal emissions. • CEMs for metals (and perhaps PM and organics) have been tested and are on the way to being commercially available. Some facilities would have installed CEMs voluntarily if available.

COMMITMENT	WHERE WE ARE	WHERE WE WANT TO BE IN TWO YEARS
RISK ASSESSMENTS Conduct site-specific risk assessments (including indirect exposure pathways) as part of RCRA permitting process. Develop updated, final guidance on conducting risk assessments at combustion facilities. Make EPA and state technical experts available to serve on risk assessment teams to assist regions and states.	• Approximately 30-40 risk assessments underway at HW incinerators and BIFs under oversight of regions or states. • Two key Headquarters guidance documents developed and released: (1) Draft Addendum to 1991 ORD Guidance on indirect risk assessments released in Nov. 1993 (subjected to public and SAB review and currently being revised); (2) OSW implementation guidance on trial burns and risk assessments at RCRA combustion facilities released in draft in Fall 1993 and revised in June 1994. • Headquarters financial support afforded to regions. Headquarters Risk Assessment Review Team formed to help regions perform risk assessments. About 10 HQ reviews completed or under way. HQ developing risk assessment training course for regional and state personnel.	• Sound risk assessments being conducted at pace that allows final permit decisions to be made without delay at interim status combustion facilities. • Issue final Addendum. • Issue updated OSW implementation guidance, with emphasis on improvements that streamline the risk screening procedures but that continue to give sound results without being overly conservative. • Risk assessment results fully integrated with technical standards rulemaking. • Continued HQ support; deliver training.
OMNIBUS PERMIT CONDITIONS Use omnibus permit authority if and when necessary to add permit conditions on metals and dioxins/furans. As interim measure, use omnibus authority if and when necessary to include technology-based limits of 30 ng/dscm for dioxins and 0.015 gr/dscf in permits being issued.	• Regions considering use of omnibus authority to impose interim limits in individual permit actions. • A few individual facilities (e.g., WTI incinerator) have included the interim limits for dioxin (30 ng.) and PM (0.015 gr.) in permits.	• Promulgation of final rulemaking to upgrade technical standards by Dec. 1996 (with possible effective date phase-in). As necessary, omnibus authority will be used to address air emissions.

COMMITMENT	WHERE WE ARE	WHERE WE WANT TO BE IN TWO YEARS
PERMITTING PRIORITIES Establish priority for reaching final permit decisions on interim status incinerators and BIFs not yet under permit controls. Call in permit applications for all commercial facilities by May 1994 and all others by May 1996. Expedite permit decisions particularly with respect to bringing interim status facilities under permit controls as soon as possible.	• National priority for interim status combustion facilities established in May 1993 by Draft Strategy and OSWER memoranda to regions and states. States and regions have generally shown consistency with national priority. • All commercial combustion facility permit applications were called in by May 1994. Some still undergoing completeness review, and some applications returned for further information. • 3 decisions (denials) made in FY 1994; 20-40 decisions estimated for next few years, taking into account the need for pre-decision risk assessments and for better trial burns. • Less or no work being done in regions and states on non-commercial facility permits (unless no commercial facilities exist in the state or region).	• Higher priority given to permits where environmental gains would be maximized and risks minimized by final permit determination. Priority scheme would also give low priority to new, non-replacement capacity. • All commercial permit applications would be complete and reviewed. • Trial burns completed or scheduled for 10-20 facilities. Final permit determinations made if trial burns complete.

COMMITMENT	WHERE WE ARE	WHERE WE WANT TO BE IN TWO YEARS
PUBLIC PARTICIPATION IN PERMITTING Enhance public participation in permitting of incinerators and BIFs. Direct regions and states to provide enhanced opportunities for public involvement prior to finalizing rule changes. Provide for public comment on trial burn plans.	• RCRA Public Involvement guidance manual finalized and sent to regions in Sept. 1993. • In June 1994, Proposed Rule to enhance public participation published. Comments are now being reviewed. • Also in June 1994, OSWER AA memorandum sent to regions and states directing immediate implementation of certain provisions of proposed rule covering enhanced public participation, including public comment on trial burn plans. • Going beyond just combustion-related issues, the OSWER AA's Environmental Justice and Siting Task Force was formed in March 1994. This Task Force examined opportunities for greater public participation in RCRA decision-making and addressed specific EJ concerns regarding siting. OSWER is currently following up on Task Force recommendations, including efforts related to providing better public access to information and developing a proposed rule to upgrade RCRA technical location standards.	• Community-based public involvement is improved. • Final Rule providing for enhanced public participation in RCRA permitting released on schedule in July 1995 and being implemented. • Improve opportunities for EJ communities to participate in decision-making. • Develop and publish proposed rule to upgrade RCRA technical location standards.

COMMITMENT	WHERE WE ARE	WHERE WE WANT TO BE IN TWO YEARS
ENFORCEMENT Enhance inspection and enforcement for incinerators and BIFs.	• Inspections of all commercial combustion facilities given high priority in regions and states in FY 1994 and FY 1995. • Over 255 combustion facilities inspected between 3/1/94 and 9/30/94, and many more than once. • Three EPA-state enforcement initiatives undertaken, involving 51 complaints and 43 settlements with over $31.5 million in proposed new penalties and over $6 million collected in settlements. • Compliance-oriented activities have included: (1) compliance workshops with affected industries; (2) preparation of compliance guidance documents on trial burns, trial burn failure, and waste analysis plans. • Enhanced compliance and enforcement training for Regional and state personnel.	• Increased compliance rates. • Increased levels of inspections and higher public confidence in agency oversight activities and facility compliance. Explore avenues to enhance and promote public involvement in compliance and enforcement activities where appropriate. • Provide increased level of compliance and enforcement training for regional and state personnel. • Prepare and release user-friendly guidance on waste analysis plans, EPA penalty policy, and other important aspects of compliance and enforcement program. • CEMs for metals (and perhaps PM and organics) tested and on way to being commercially available. Some facilities install CEMs voluntarily if available.

COMMITMENT	WHERE WE ARE	WHERE WE WANT TO BE IN TWO YEARS
INNOVATIVE TREATMENT TECHNOLOGIES Enhance efforts to foster innovate technologies for safe and effective treatment of hazardous waste and for reduction of hazardous waste, including an investigation of the feasibility and risks associated with alternative technologies.	• TIO engaged in ongoing work to spur development of alternative treatment and innovative technologies with respect to remediation wastes. TIO has developed and released series of monographs on alternative treatment technologies. • OSW engaged in survey of alternative treatment technologies, particularly with respect to level of commercial availability and risks associated with technologies.	• Private sector would have started to adapt current technologies or begun to develop new technologies to treat RCRA wastes to reduce volume, toxicity, and/or mobility. • Structural barriers in RCRA program that might interfere with alternative treatment technology development have been identified and options to remove those barriers have been explored. • Develop sufficient data on emissions and risks from alternative treatment technologies.
PERMIT APPEALS REFORM Explore rulemaking to reform permit appeal process to prevent the continued burning of waste during administrative appeal process where permit was denied at regional level.	• In March 1994, Administrator's memorandum sent to EAB directing expedited treatment for appeals of permit denials by regions. • Proposed rule to enhance public participation (published June 1994) contains provisions that would require combustion units immediately to cease operations under any conditions for which the unit failed a trial burn.	• Separate, additional rulemaking not needed. • Finalize proposed rule as scheduled for July 1995.
EXCESS CAPACITY Explore usefulness of national capacity reduction goal.	• Internal and external discussions held with stakeholders. Certain environmental and citizen groups want a phase out of combustion capacity. Industry argues that marketplace should be left to reduce overcapacity without EPA interference. • Market forces have had significant impact on waste management business, and corrections for overcapacity (e.g., through lowering of prices) are evident. HW combustion permit applications are being withdrawn at greater pace than new applications being filed.	• EPA regulations ensure that treatment and disposal of HW is done in an environmentally sound manner. • Individual company and market response to EPA standards drive combustion capacity and demand for combustion services. • Market forces sufficient to accommodate short-term bursts in demand for combustion services (e.g., due to increased site remediations, new waste listings, shutdowns of existing units, etc.)